

HIGH NORTH ID:
00054072
Date: 2021-05-27
Certificate: 1622141242



241 Hanlan Rd, Unit 7
Woodbridge, ON, L4L 3R7
1-416-864-6119

Client: Mother Labs
#115 343 70th STREET,
SASKATOON, SK, CANADA,
Saskatoon, SK, S7P0E3
Name: [REDACTED]

Strain: Strawberry Grail
Lot: SAM2105-047
Matrix: Flower
Sub-matrix: Dried Flower
Sampled: 2021-05-20
Received: 2021-05-21

Certificate of Analysis

Cannabinoid Analysis	LOD (%)	LOQ (%)	wt%	mg/g
Total THC [(THCA x 0.877) + D9-THC]			22.454	224.536
Total CBD [(CBDA x 0.877) + CBD]			0.092	0.923
THCA-A	0.0090	0.03	24.381	243.812
CBGA	0.0041	0.03	1.458	14.58
D9-THC	0.0093	0.03	1.071	10.713
CBG	0.0094	0.03	0.13	1.301
CBDA	0.0100	0.03	0.105	1.052
D8-THC	0.0137	0.03	ND	ND
CBC	0.0060	0.03	ND	ND
CBD	0.0069	0.03	ND	ND
THCV	0.0093	0.03	ND	ND
CBN	0.0067	0.03	ND	ND
CBDV	0.0090	0.03	ND	ND
Total of all quantified cannabinoids:			27.146	271.458

Terpene Analysis	LOD (%)	LOQ (%)	wt%
Trans-Caryophyllene	0.0001	0.01	0.291
(R)-(+)-Limonene	0.0001	0.01	0.25
Farnesene-2	0.0001	0.01	0.247
Linalool	0.0001	0.01	0.227
beta-Myrcene	0.0001	0.01	0.196
Terpineol (mix of isomers)	0.0001	0.01	0.095
alpha-Humulene	0.0001	0.01	0.08
beta-Pinene	0.0001	0.01	0.063
alpha-Bisabolol	0.0001	0.01	0.056
(R)-Endo-(+)-Fenchyl	0.0001	0.01	0.048

Abbreviations: wt% = percentage of weight, CFU = colony forming units, ppm = Parts per million, ppb = Parts per billion, ND = None Detected, BLQ = Below Limit of Quantification, LOQ = Limit of Quantification, LOD = Limit of Detection, RL = Reporting Limit

Authorized by:

Ryan Lee
Quality Assurance

Terpene Analysis	LOD (%)	LOQ (%)	wt%
alpha-Pinene	0.0001	0.01	0.045
Caryophyllene oxide	0.0001	0.01	0.025
trans-Nerolidol	0.0001	0.01	0.02
Valencene	0.0001	0.01	0.015
Camphene	0.0001	0.01	0.013
Geraniol	0.0001	0.01	0.012
Fenchone (mix of isomers)	0.0001	0.01	BLQ
Citronellol	0.0001	0.01	BLQ
Terpinolene	0.0001	0.01	BLQ
trans-beta-Ocimene	0.0001	0.01	BLQ
Phytol	0.0001	0.06	BLQ
(+)-Cedrol	0.0001	0.01	ND
Guaiol	0.0001	0.01	ND
cis-Nerolidol	0.0001	0.01	ND
Eugenol	0.0001	0.01	ND
alpha-Cedrene	0.0001	0.01	ND
Pulegone	0.0001	0.01	ND
Geraniol acetate	0.0001	0.01	ND
Nerol	0.0001	0.01	ND
gamma-Terpineol	0.0001	0.01	ND
Camphor (mix of isomers)	0.0001	0.01	ND
Hexahydrothymol	0.0001	0.01	ND
Isoborneol	0.0001	0.01	ND
Isopulegol	0.0001	0.01	ND
Ocimene (mixture of	0.0001	0.01	ND
gamma-Terpinene	0.0001	0.01	ND
Sabinene Hydrate	0.0001	0.01	ND
p-Isopropyltoluene (p-	0.0001	0.01	ND
Eucalyptol	0.0001	0.01	ND
alpha-Terpinene	0.0001	0.01	ND
(1S)-3-Carene	0.0001	0.01	ND
alpha-Phellandrene	0.0001	0.01	ND
Sabinene	0.0001	0.01	ND

Total of all quantified terpenes: **1.683**

Moisture Analysis 10.29%

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Details of Testing

Cannabinoid Analysis

Analysis of 11 Cannabinoids by HPLC & UHPLC

LOQ of 0.3% for Resins/Distillates/Isolates; 0.025% for Tablets; 0.03% for Flower/Oil Samples

HIGH NORTH Laboratories Methods: LAB-MTD-020, LAB-MTD-021, LAB-MTD-023 & LAB-MTD-030

Terpene Analysis

Profile of 42 Terpenes by GC-MS/MS

Cannabis Flower, Oil

HIGH NORTH Laboratories Method: LAB-MTD-018

Moisture Analysis

Water Activity & Moisture Content (Loss on Drying)

HIGH NORTH Laboratories Method: LAB-MTD-031 & LAB-MTD-017

Microbial Analysis, Powdery Mildew & Gender Determination

Molecular detection and quantitation by PCR & qPCR

Cannabis Flower, Cannabis-Infused Products

HIGH NORTH Laboratories Method: MIC-MTD-001 & MIC-MTD-005

Mycotoxin Analysis

Determination of Aflatoxins B1, B2, G1, G2 and Ochratoxin-A by LC-MS/MS

Cannabis Flower, Oil, Tablets

HIGH NORTH Laboratories Method: LAB-MTD-010, LAB-MTD-029

Heavy Metal Analysis

Determination of Heavy Metal contamination (Arsenic, Cadmium, Lead & Mercury) by ICP-MS

Cannabis Flower, Oil, Topicals, Tablets

HIGH NORTH Laboratories Method: LAB-MTD-027

Residual Solvents Analysis

Determination of 25 Residual Solvents by GC-MS/MS

Cannabis Oil, Tablets

HIGH NORTH Laboratories Method: LAB-MTD-005 & LAB-MTD-028

Pesticide Analysis

Determination of 96 Pesticide Residues by LC-MS/MS and GC-MS/MS

Cannabis Flower, Oil

HIGH NORTH Laboratories Method: LAB-MTD-010

Determination of Butane and Propane Residual Solvents in Cannabis Oil

HIGH NORTH Laboratories Method: LAB-MTD-034

Foreign Matter Analysis

Visual/Magnified Inspection for Foreign Matter

HIGH NORTH Laboratories Method: LAB-MTD-022

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